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### 1989 DAIRY FARM BUSINESS SUMMARY NORTHERN NEW YORK REGION

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### 1989 DAIRY FARM BUSINESS SUMMARY Northern New York\*

#### INTRODUCTION

Dairy farmers throughout New York State have been participating in Cornell Cooperative Extension's farm business summary and analysis program since the early 1950's. Each participating farmer receives a comprehensive business summary and analysis of his or her farm business. The information in this report represents an average of the data submitted from farms in the Northern New York region.

#### Program Objective

The primary objective of the dairy farm business summary, DFBS, is to help farm managers improve the business and financial management of their farm through appropriate use of historical farm data and the application of modern farm business analysis techniques. In short, DFBS identifies the business and financial information farmers need and demonstrates how it should be used in identifying and evaluating strengths and weaknesses of the farm business.

#### Format Features

This regional report follows the same general format as in the 1989 DFBS printout received by all participating dairy farmers. Worksheets are included to give non-DFBS participants an opportunity to summarize their businesses. The analysis tables have an open column or section labeled  $\underline{\text{My}}$   $\underline{\text{Farm}}$ . It may be used by any dairy farm manager who wants to compare his or her business with the average data of this region.

This report features:

- (1) an <u>income statement</u> including accrual adjustments for farm business expenses and receipts, as well as measures of profitability with and without appreciation,
- (2) a complete balance sheet with analytical ratios,
- (3) a cash flow summary including debt repayment ability,
- (4) a cropping analysis,
- (5) a dairy analysis, and
- (6) capital and labor efficiency analysis.

Micro DFBS, a computer program which enables Cooperative Extension agents and specialists to calculate and print individual farm business reports in their offices, is now being used by the dairy farm management field staff for 90 percent of the farms cooperating. This innovative approach provides faster processing of farm record data and increased use of the DFBS in farm management programs.

This report was written by Stuart F. Smith, Senior Extension Associate, Farm Management. Linda Putnam was in charge of data preparation. Cindy Farrell and Beverly Carcelli prepared the publication. Farm Business data was collected by Cooperative Extension agents Anita Deming, Russell Coombe, David Dodge, Craig Trowbridge, Pat Beyer, Gerke van der Zwaag, and LuAnn King.

<sup>\*</sup>Northern New York, with the number of participating farms in parentheses, is comprised of Clinton (7), Essex (5), Franklin (22), Jefferson (18), Lewis (11), and St. Lawrence (13) Counties.

#### SUMMARY AND ANALYSIS OF THE FARM BUSINESS

#### Business Characteristics

Finding the right management strategies is an important part of operating a successful farm. Various combinations of farm resources, enterprises, business arrangements, and management techniques are used by the dairy farmers in this region. The following table shows important farm business characteristics and the number of farmers reporting these characteristics.

BUSINESS CHARACTERISTICS
76 Northern New York Dairy Farms, 1989

Type of Farm	Number	Type of Barn	Number
Dairy	76	Stanchion/Tie-Stall	44
Part-time dairy	0	Freestall	25
Dairy cash-crop	0	Combination	7
Part-time cash-crop dairy	7 0		
-		Milking System	<u>Number</u>
Type of Ownership	Number	Bucket & carry	1
Owner	72	Dumping station	11
Renter	4	Pipeline	36
		Herringbone parlor	23
Type of Business	Number	Other parlor	5
Single proprietorship	60		
Partnership	15	Milking Frequency	Number
Corporation	1	2x/day	72
		3x/day	4
Business Record System	Number	Other	0
ELFAC	1		
Account Book	50	Production Records	Number
Agrifax (mail-in only)	5	DHIC	5 <b>8</b>
On-Farm Computer	8	Owner-Sampler	8
Other	12	Other	5
		None	5

The averages used in this report were compiled using data from all the participating dairy farms in this region unless noted otherwise. There are full-time dairy farms, part-time farms, dairy cash-crop farms, farm renters, partnerships, and corporations included in the average. These specific classifications are used to separate farms in the State Business Summary.

#### Income Statement

In order for an income statement to accurately measure farm income, it must include cash transactions and accrual adjustments (changes in accounts payable, accounts receivable, inventories, and prepaid expenses).

<u>Cash paid</u> is the actual cash paid during the year and does not necessarily represent the cost of goods and services actually used.

<u>Change in inventory</u>: An increase in inventory is subtracted in computing accrual expenses because it represents purchased inputs not actually used during the year. A decrease in inventory is added to expenses because it represents the cost of inputs purchased in a prior year and used this year.

CASH AND ACCRUAL FARM EXPENSES
76 Northern New York Dairy Farms, 1989

Expense Item	Cash Paid +	Change in Inventory or Prepaid Expense* +	Change in Accounts Payable -	Accrual Expenses
	\$ 17,809	\$ 0	\$ 8	\$ 17,817
<u>Hired Labor</u> Feed	\$ 17,009	Ş Ü	ų o	V 17,017
Dairy grain & conc.	57,003	-608	-278	56,117
Dairy roughage	2,180	-150	-79	1,951
Nondairy	601	-8	59	652
Machinery				
Mach. hire, rent/lease	1,961	0	0	1,961
Machinery repairs/parts	11,559	-161	-45	11,353
Auto exp. (farm share)	618	0	0	618
Fuel, oil & grease	4,680	-29	10	4,661
Livestock	•			
Replacement livestock	2,849	0	-45	2,804
Breeding	2,592	0	4	2,596
Vet & medicine	3,871	-17	20	3,874
Milk marketing	4,402	0	0	4,402
Cattle lease/rent	424	0	0	424
Other livestock expense	9,310	-19	- 33	9,258
Crops				
Fertilizer & lime	7,367	-271	34	7,130
Seeds & plants	3,010	-426	-15	2,569
Spray, other crop exp.	2,797	-61	23	2,759
<u>Real Estate</u>				
Land/bldg./fence repair	4,248	-42	131	4,337
Taxes	4,868	0	214	5,082
Rent & lease	2,888	-6	36	2,918
<u>Other</u>			_	
Insurance	3,945	0	-5	3,940
Telephone (farm share)	489	0	-1	488
Electricity (farm share)	5,632	0	-28	5,604
Interest paid	15,849	0	0	15,849
Miscellaneous	2,385	-8	0	2,377
Total Operating	\$173,337	\$ -1,806	\$ 10	\$171,541
Expansion livestock	2,150	0	0	2,150
Machinery depreciation				14,291
Building depreciation				6,004
TOTAL ACCRUAL EXPENSES				\$193,986

Changes in prepaid expenses are a net change in non-inventory expenses that have been paid in advance of their use, for example, 1990 rent paid in 1989. If 1989 funds used to prepay 1990 rent exceeded the amount of 1989 rent prepaid in 1988, the amount of this excess is entered as a negative number to exclude it from 1989 rental expenses. The excess prepaid rent should be charged against the future year's business operation. A decrease in prepaid rent is added to expenses because it represents use of resources during this year that were paid for in past years but should be charged against this year's operation.

<u>Change in accounts payable</u>: An increase in accounts payable from beginning to end of year is added and a decrease is subtracted when calculating accrual expenses.

<u>Accrual expenses</u> are the costs of inputs actually used in this year's production. They are the total of cash paid, changes in inventory or prepaid expenses, and changes in accounts payable.

#### CASH AND ACCRUAL FARM EXPENSES WORKSHEET

	Cash	Change in Inventory or Prepaid	Change in	Accrual
Expense Item	Paid +		Accounts Payable	- Expenses
<u> Hired Labor</u>	\$	\$	\$	\$
<u>Feed</u>				
Dairy grain & conc.			***	***************************************
Dairy roughage			***************************************	
Nondairy		***		
Machinery				
Mach. hire, rent/lease				
Machinery repairs/parts				
Auto exp. (farm share)				
Fuel, oil & grease				
Livestock				
Replacement livestock				
Breeding				
Vet & medicine				
Milk marketing				
Cattle lease/rent	water the same statement of the same stateme			**************************************
Other livestock expense				-
Crops				
Fertilizer & lime				
Seeds & plants				
Spray, other crop		Saleston and the salest salest salest	**************************************	**************************************
expense				
Real Estate				
Land, bldg., fence rep.				
Taxes				
	************			
Rent & lease			And the state of t	
<u>Other</u>				
Insurance		· · · · · · · · · · · · · · · · · · ·		
Telephone (farm share)		4990 - 1000 00 00 00 00 00 00 00 00 00 00 00 0	48	
Electricity (farm share)				
Interest paid				
Miscellaneous				
Total Operating	\$	\$	\$	\$
Expansion livestock				
Machinery depreciation	1			
Building depreciation				The second secon
TOTAL ACCRUAL EXPENSES				Ś

### CASH AND ACCRUAL FARM RECEIPTS 76 Northern New York Dairy Farms, 1989

Receipt Item	Cash Receipts	Change i + Inventor		Accrual - Receipts
Milk sales	\$201,703		\$ 3,304	\$205,007
Dairy cattle	14,250	\$ 3,905	18	18,173
Dairy calves	3,350		1	3,351
Other livestock	104	-24	0	80
Crops	1,202	3,854	35	5,091
Government receipts	2,639	- 5*	0	2,634
Custom machine work	382		0	382
Gas tax refund	154		0	154
Other	2,106		<u> 155</u>	2,261
Less nonfarm noncash cap.	**	(-)0		(-) <u>0</u>
Total Accrual Receipts	\$225,890	\$ 7,730	\$ 3,514	\$237,134

<sup>\*</sup>Change in advanced government receipts.

<u>Cash receipts</u> include the gross value of milk checks received during the year plus all other payments received from the sale of farm products, services, and government programs. Nonfarm income is not included in calculating farm profitability.

Changes in inventory are calculated by subtracting beginning of year values from end of year values excluding appreciation. Increases in livestock inventory caused by herd growth and/or quality are added, and decreases caused by herd reduction and/or quality are subtracted. Changes in inventories of crops grown are also included. Changes in advanced government receipts are calculated by subtracting the end year balance from the beginning year balance (balances are listed with the current liabilities on the Balance Sheet).

<u>Changes in accounts receivable</u> are calculated by subtracting beginning year balances from end year balances. The January milk check for this December's marketings compared with the previous January's check is included as a change in accounts receivable.

<u>Accrual receipts</u> represent the value of all farm commodities produced and services actually generated by the farmer during the year.

#### CASH AND ACCRUAL FARM RECEIPT WORKSHEET

Receipt Item	Cash Receipts	+_	Change in Inventory	+	Change in Accounts Receivable	Accrual - Receipts
Milk sales Dairy cattle Dairy calves Other livestock Crops Government receipts Custom machine work Gas tax refund Other	\$		\$		\$	\$
Less gifts of cattle & c Total Accrual Receipts	rops \$	(-	) \$		\$	(-)

<sup>\*\*</sup>Gifts or inheritances of cattle or crops included in inventory.

#### Profitability Analysis

Farm operators contribute labor, management, and capital to their businesses and the best combination of these resources maximizes income. Farm profitability can be measured as the return to all family resources or as the return to one or more individual resources such as labor and management.

Net farm income is the return to the farm operators and other unpaid family members for their labor, management, and equity capital. It is the farm family's net annual return from working, managing, financing, and owning the farm business. This is not a measure of cash available from the year's business operation. Cash flow is evaluated later in this report.

Net farm income is computed both with and without appreciation. Appreciation represents the change in values caused by annual changes in prices of livestock, machinery, real estate inventory, and stocks and certificates (other than FLB and PCA). Appreciation is a major factor contributing to changes in farm net worth and must be included for a complete profitability analysis.

NET FARM INCOME
76 Northern New York Dairy Farms, 1989

Item	Average	My Farm
Total accrual receipts	\$237,134	\$
Appreciation: Livestock	10,856	
Machinery	4,763	
Real Estate	5,974	
Other Stock/Certificates	10	
Total Including Appreciation	\$258,717	\$
Total accrual expenses	- <u>193,986</u>	-
Net Farm Income (with appreciation)	\$ 64,731	\$
Net Farm Income (without appreciation)	\$ 43,148	\$

Return to operators' labor, management, and equity capital measures the total net farm income for the farm operator(s). It is calculated by deducting a charge for unpaid family labor from net farm income. Operators' labor is not included in unpaid family labor. Return to operators' labor, management, and equity capital has been calculated both with and without appreciation. Appreciation is considered an important part of the return to ownership of farm assets.

RETURN TO OPERATORS' LABOR, MANAGEMENT, AND EQUITY 76 Northern New York Dairy Farms, 1989

	Ave:	rage	My	Farm
Item	With Apprec.	Without Apprec.	With Apprec.	Without Apprec.
Net farm income Family labor unpaid	\$ 64,731	\$ 43,148	\$	\$
@ \$750 per month Return to operators' labor,	- <u>2.516</u>	- <u>2,516</u>	**	
management, & equity	\$ 62,215	\$ 40,632	\$	\$

Labor and management income is the return which farm operators receive for their labor and management used in operating the farm business. Appreciation is not included as part of the return to labor and management because it results from ownership of assets rather than management of the farm business. Labor and management income is calculated by deducting the opportunity cost of using equity capital at a real interest rate of five percent, from the return to operators' labor, management, and equity capital excluding appreciation. The interest charge of five percent reflects the long-term average rate of return above inflation that a farmer might expect to earn in comparable risk investments.

LABOR AND MANAGEMENT INCOME
76 Northern New York Dairy Farms, 1989

Item	Average	My Farm
Return to operators' labor, management,		
& equity without appreciation	\$ 40,632	\$
Real interest @ 5% on \$332,235		
average equity capital	- <u>16,612</u>	•
Labor & Management Income	\$ 24,020	\$
Labor & Management Income per		
1.35 Operator/Manager	\$ 17,792	\$

Return on equity capital measures the net return remaining for the farmer's equity or owned capital after a charge has been made for the owner-operator's labor and management. The earnings or amount of net farm income allocated to labor and management is the opportunity cost of operators' labor and management estimated by the cooperators. Return on equity capital is calculated with and without appreciation. The rate of return on equity capital is determined by dividing the amount returned by the average farm net worth or equity capital. Return on total capital is calculated by adding interest paid to the return on equity capital and then dividing by average farm assets to calculate the rate of return on total capital.

RETURN ON EQUITY CAPITAL AND RETURN ON TOTAL CAPITAL 76 Northern New York Dairy Farms, 1989

Item	Average	My Farm
Return to operators' labor, management,		
& equity capital with appreciation	\$ 62,215	\$
Value of operators' labor & management	- 26,302	-
Return on equity capital with appreciation	\$ 35,913	\$
Interest paid	\$ 15,849	\$
Return on total capital with appreciation	\$ 51,762	\$
Return on equity capital without appreciation	\$ 14,330	\$
Return on total capital without appreciation	\$ 30,179	\$
Rate of return on average equity capital:		
with appreciation	10.8%	8
without appreciation	4.3%	
Rate of return on average total capital:		
with appreciation	10.2%	*
without appreciation	5.9%	<del></del> 8

#### Farm and Family Financial Status

The first step in evaluating the financial position of the farm is to construct a balance sheet which identifies all the assets and liabilities of the business. The second step is to evaluate the relationship between assets, liabilities, and net worth and changes that occurred during the year.

1989 FARM BUSINESS & NONFARM BALANCE SHEET 76 Northern New York Dairy Farms, January 1, 1990

	TOTA DUTT	n rililing	,	
Form Annata	Do. 21	Farm Liabilities	Jan. 1	Dec. 31
Farm Assets Jan, 1	Dec. 31	& Net Worth	Jan. 1	Dec, Ji
Current		Current		
Farm cash, checking		Accounts payable	\$ 3,675	\$ 3,683
& savings \$ 6,297 \$	7,255	Operating debt	1,958	2,144
Accounts rec. 16,316	19,830	Short-term	1,203	2,267
Prepaid exp. 47	53	Advanced govt. re-	c0	5
Feed & supplies 33,360	39,013			
Total \$ 56,020 \$	66,151	Total	\$ 6,836	\$ 8,100
<u>Intermediate</u>				
Dairy cows:		<u>Intermediate</u>		
	88,915	Structured debt		
leased 118	61	1-10 years	\$ 66,833	\$ 68,691
Heifers 33,511	39,458	Financial lease		
Bulls/other lvstk. 768	780	(cattle/mach.)	862	582
Mach./eq. owned 99,999	109,437	FLB/PCA stock	2,552	1,430
Mach./eq. leased 744	521			
FLB/PCA stock 2,552	1,430	Total	\$ 70,247	\$ 70,703
Other stock/cert. 2.583	2,394			
Total \$220,412 \$	242,996	Long Term		
Long-Term		Structured debt		
Land/buildings:		≥10 yrs	\$ 98,593	\$ 94,774
owned \$210,786 \$	217,359	Financial lease		
	483	(structures)	782	483 \$ 95,257
Total \$211,568 \$	217,842	Total	\$ 99,375	\$ 95,257
Total Farm Assets \$488,000 \$	526,989	Total Farm Liab.	\$176,458	\$174,061
		FARM NET WORTH	\$311,542	\$352,928
(Average for 48 farms reporti	ng)	Nonfarm Liabilit	iesk	
Nonfarm Assets* Jan. 1				Dec. 31
Personal cash, chkg.		Nonfarm Liab.		
	\$ 5,177	NONFARM NET WORT	H \$ 35,047	\$ 36,951
Cash value life ins. 5,867	6,726			
Nonfarm real estate 6,456	6,602	FARM & NONFARM*		
Auto (personal sh.) 3,741	4,290	Total Assets	\$525,153	
Stocks & bonds 4,863	5,760	Total Liabilitie	s <u>178,564</u>	<u>177,550</u>
Household furn. 10,885	11,281			
All other <u>408</u>	604	TOTAL FARM & NON		****
Total Nonfarm \$ 37,153	\$ 40,440	FARM NET WORTH	\$346,589	\$389,879

<sup>\*</sup>Assumes that average nonfarm assets and liabilities for the nonreporting farms were the same as for those reporting.

Financial lease obligations are included in the balance sheet. The present value of all future payments is listed as a liability since the farmer is committed to make the payments by signing the lease. The present value is also listed as an asset, representing the future value the item has to the business. For 1989, leases were discounted by 11.5 percent.

Advanced government receipts are included as current liabilities. Government payments received in 1989 that are for participation in the 1990 program are the end year balance and payments received in 1988 for participation in the 1989 program are the beginning year balance.

			Date		
1	989 FARM I	BUSINESS &	NONFARM BALANCE SHE	ET	
Farm Assets	Jan. 1	Dec. 31	Farm Liabilities & Net Worth	Jan. l	Dec. 31
Current Farm cash, checking & savings Accounts rec.	5		<u>Current</u> Accounts payable Operating debt:		
Prepaid expense Feed & supplies Total			Short Term:		
Intermediate Dairy cows: owned leased	- Anna Marian		Adv. govt. rec. Total Intermediate		
Heifers Bulls/other lvstk. Mach./eq. owned Mach./eq. leased					
FLB/PCA stock Other stock/cert. Total			Financial lease (cattle/mach.) FLB/PCA stock Total		
Long-Term Land/buildings: owned leased			Long-Term		
Total Total Farm Assets			Financial lease (structures) Total Total Farm Liab.		
Nonfarm Assets	I 1	Do 21	FARM NET WORTH  Nonfarm Liabilitie		D - 21
Personal cash, chkg & savings Cash val. life ins.		Dec. 31	& Net Worth Nonfarm Liab.:	Jan. 1	Dec. 31
Nonfarm real est. Auto (pres. share) Stocks & bonds			Total Nonfarm		
Household furn. All other Total Nonfarm			Liabilities Nonfarm Net Worth		
TOTAL FARM & NONFAR Total Farm & Nonfar Less Total Farm & N Farm & Nonfarm Net	m Assets Jonfarm Li	abilities	Jan, 1	Dec	. 31

Balance sheet analysis involves examination of relative asset and debt levels for the business. Percent equity is calculated by dividing end of year net worth by end of year assets. The debt to asset ratio is compiled by dividing liabilities by assets. Low debt to asset ratios reflect business solvency and the potential capacity to borrow. Debt levels per productive unit represent old standards that are still useful if used with measures of cash flow and repayment ability. The change in farm net worth without appreciation is an excellent indicator of farm generated financial progress.

BALANCE SHEET ANALYSIS
76 Northern New York Dairy Farms, January 1, 1990

Item	Water State of the Control of the Co				My Farm
Financial Ratios - Farm:					
Percent equity			6	7%	<b>%</b>
Debt/asset ratio: total			0.3	3	
long-term			0.4	4	
intermediate	current		0.2	5	
<u>Change in Net Worth</u> : Without appreciation	•		\$ 19,80		\$
With appreciation			41,38	6	\$
Farm Debt Analysis:				_	
Accounts payable as % of total				2%	<u> </u>
Long-term liabilities as a % o			5	<u> </u>	
Current & inter. liab. as a %	of total d	ebt	4	5%	*
		Per Ti	llable		Per Tillable
Farm Debt Levels:	Per Cow	Acre	<u>Owned</u>	Per Cow	Acre Owned
Total farm debt	\$ 2,001	\$	879	\$	\$
Long-term debt	1,095		481		
Intermediate & current debt	906		398		

<u>Farm inventory balance</u> is an accounting of the value of assets used on the balance sheet and the changes that occur from the beginning to end of year. Changes in the livestock inventory are included in the dairy analysis. Net investment indicates whether the capital stock is being expanded (positive) or depleted (negative).

FARM INVENTORY BALANCE
76 Northern New York Dairy Farms, 1989

Item	Avg. of Regional Farms My Farm			Farm		
	<u>R.E.</u>	1	Mach./Eq	L <u>.</u>	<u>R.E.</u>	Mach./Eq.
Value beg. of year	\$210,	786	\$ 99	,999	\$	\$
Purchases \$	9,850*	\$ 19	9,466	\$		\$
<pre>Gift/inheritance +</pre>	790	+	145	+		+
Lost capital -	3,417			_		
Sales -	915	-	644	-		-
Depreciation	6,004	- 14	4,291	**		**
Net investment		304	_ 4	,676	=+	=+
Appreciation	+ 6,2	270**	+ 4	, 763	+	+
Value end of year	\$217,	359	\$109	,437	\$	\$

<sup>\*\$ 1,064</sup> land and \$ 8,786 buildings and/or depreciable improvements. \*\*Excludes \$-30 of appreciation on assets sold during the year.

#### Cash Flow Statement

Completing an annual cash flow statement is an important step in understanding the sources and uses of funds for the business. Understanding last year's cash flow is the first step toward planning and managing cash flow for the current and future years.

The <u>annual cash flow statement</u> is structured to compare all the cash inflows with all the cash outflows for the year. A complete list of cash inflows and cash outflows are identified in the following table. By definition, total cash inflows must equal total cash outflows when beginning and ending balances are included. Any imbalance is, therefore, the error from incorrect accounting of cash inflows and cash outflows. Whenever an imbalance exists all actually and appears to the error from incorrect accounting of cash inflows and cash outflows. Whenever an imbalance exists all actually and appears to the error from the error fro

imbalance evicto all anter C	Average	My Farm
Cash Inflows		
Beginning farm cash, checking & savings	\$ 6,297	\$
Cash farm receipts	225,890	
Sale of assets: Machinery	644	****
Real estate	467	
Other stock & certificate	212	
Money borrowed (intermediate & long-term)	18,643	
Money borrowed (short-term)	2,740	
Increase in operating debt	186	5
Nonfarm income	5,096	
Cash from nonfarm capital used in the business	220	Name of the last o
Money borrowed - nonfarm	<u>1,050</u>	
Total	\$261,445	\$
Cash Outflows		
Cash farm expenses	\$173,338	\$
Capital purchases: Expansion livestock	2,150	Assessment Comment of the Comment of
Machinery	19,466	
Real estate	9,850	Name and the Control of the Control
Other stock & certificate	33	sent constitution of the C
Principal payments (intermediate & long-term)	20,604	
Principal payments (short-term)	1,676	
Decrease in operating debt	0	
Personal withdrawals & family expenditures		
including nonfarm debt payments	25,985	
Ending farm cash, checking & savings	7,255	
Total	\$260,356	\$
Imbalance (error)	\$ 1,089	\$

#### Repayment Analysis

The second step in cash flow analysis is to compare the debt payments planned for the last year with the amount actually paid. The measures listed below provide a number of different perspectives on the repayment performance of the business. However, the critical question to many farmers and lenders is whether planned payments can be made in 1990. The cash flow projection worksheet on the next page can be used to estimate repayment ability, which can then be compared to planned 1990 debt payments shown below.

FARM DEBT PAYMENTS PLANNED

Same 54 Northern New York Dairy Farms, 1988 and 1989

		Average		М	y Farm	
	1989 P	ayments	Planned	<u>1989 Pay</u>	ments	Planned
Debt Payments	Planned	Made	1990	Planned	Made	1990
Long-term	\$ 14,536	\$ 16,484	\$ 14,093	\$	\$	\$
Intermediate-term	15,358	17,834	17,527			
Short-term	815	1,171	1,177			
Operating (net						
reduction)	364	0	649			
Accounts payable				<del>*************************************</del>		
(net reduction)	400	11	278			
(,						
Total	\$ 31,473	\$ 35,499	\$ 33,723	\$	\$	\$
	, 0-,	<b>,</b>	7,,	7	т	_ T
Per cow	\$ 384	\$ 433		Ś	Ś	
Per cwt. 1989 milk	•			Ś	Ś	-
Percent of total	¥ 2.2>	7 2.30		4	Υ	•
1989 receipts	14	t 169				
Percent of 1989	1-4	. 104	,			-
milk receipts	16	189	<b>.</b>			
mrry recerbes	10	5 101	•			-

The <u>cash flow coverage ratio</u> measures the ability of the farm business to meet its planned debt payment schedule. The ratio shows the percentage of planned payments that could have been made with last year's available cash flow. Farmers who did not participate in DFBS last year will find in their report a cash flow coverage ratio based on planned debt payments for 1990.

CASH FLOW COVERAGE RATIO
Same 54 Northern New York Dairy Farms, 1988 and 1989

Item	Average	My Farm
Cash farm receipts	\$216,690	\$
- Cash farm expenses	165,535	
+ Interest paid	14,886	
- Net personal withdrawals from farm**	17,743	
A) - Amount Available for Debt Service B) - Debt Payments Planned for 1989	\$ 48,298	\$
(as of December 31, 1988)	\$ 31,473	\$
(A + B) = Cash Flow Coverage Ratio for 1989	1.53	

<sup>\*\*</sup>Personal withdrawals and family expenditures less nonfarm income and nonfarm money borrowed. If family withdrawals are excluded, or inaccurately included, the cash flow coverage ratio will be incorrect.

#### ANNUAL CASH FLOW WORKSHEET

	Reg	ional			Farm		expected	1989
<u>Item</u>	Ave	rage		Total	Per C	OW	Change	Projection
	(pe	r cow	)					-
Average number of cows		86						
Accrual Oper, Receipts					'	_		
Milk	\$ 2	,391	\$		\$			\$
Dairy cattle		212						
Dairy calves		39	-					
Other livestock		1			-			
Crops		59	-			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Misc. receipts		63	-					**********
Total	\$ 2	,766	\$_		\$			\$
Accrual Oper, Expenses								
Hired labor	\$	208	\$		\$			\$
Dairy grain & conc.		655						•
Dairy roughage		23	-					
Nondairy feed		8	-					***************************************
Mach. hire/rent/lease		23	-		***************************************			
Mach. rpr./parts & auto		140	-			<del></del>		
Fuel, oil & grease		54	-		41	<del></del>		
Replacement lvstk.		33	-					
Breeding		30	-		· · · · · · · · · · · · · · · · · · ·			
Vet & medicine		45		······································				
Milk marketing		51	-					
Cattle lease		5	-					
Other livestock exp.		108	-					
Fertilizer & lime		83	-					
Seeds & plants		30	-					
Spray/other crop exp.		32	-					
Land, bldg., fence repair		51						
Taxes		59	-					
Real estate rent/lease		34	•					
Insurance		34 46	-					
Utilities								
Miscellaneous		71	_					
		28	-					_
Total Less Int. Paid	=	,816	-				.,	\$
Net Accrual Operating Incom	<u>1e</u>	(to	ta]	L)				
(without interest paid)		\$ 81	,44	¥2 \$				\$
- Change in lvstk./crop inv	·.*	7	,73	30		_		
- Change in accts. rec.		3	,51	L4				
+ Change in feed/supply inv	7.**	-1	, 80	)6		_		
+ Change in accts. payable*	**		1	<u> </u>		_		
NET CASH FLOW		\$ 68	,40	)2 \$		_		\$
- Net personal withdrawals	from							•
farm (see footnote on pg	. 12	) 19	, 83	39				
Available for Farm Debt	-			_		_		·
Payments & Investments		\$ 48	.56	63 Ś				Ś
- Farm debt payments		•	,90		***************************************			·
Available for Farm Investme	nt	\$ 10						\$
- Capital purchases: cattle		,	,	· - • • • • • • • • • • • • • • • • • •				T
machinery & improvements	,	\$ 31	.40	99				
Additional Capital Needed		T	,	Ś	<del></del>			Ś
				٧	<del></del>			Υ

<sup>\*</sup>Includes change in advance government receipts.

\*\*Includes change in prepaid expenses.

\*\*\*Excludes change in interest account payable.

#### Cropping Analysis

The cropping program is an important part of the dairy farm business which is often inadequately managed. A complete evaluation of what the available land resources are, how they are being used, how well crops are producing, and what it costs to produce them is required to evaluate alternative cropping and feed purchasing choices.

LAND RESOURCES AND CROP PRODUCTION
76 Northern New York Dairy Farms, 1989

Item		Average				My Farm	
Land			ented	<u>Total</u>	Owned	Rented	<u>Total</u>
Tillable		98	81	279			
Nontillable		54	8	62	***		
Other nontillable	10	)3	<u> 10</u> _	113			
Total	35	55	99	454			
Crop Yields	<u>Farms</u>	Acres	Prod	/Acre	Acre	es Prod	/Acre
Hay crop	75	171	2.	39 tn DM			_ tn DM
Corn silage	64	81	14.	09 tn			tn
_			4.	97 tn DM			tn DM
Other forage	13	25	1.	53 tn DM			tn DM
Total forage	76	240	3.	11 tn DM			tn DM
Corn grain	20	43	98.	99 bu			bu
Oats	9	46	54.	07 bu			bu bu
Wheat	1	14	30.	00 bu			bu bu
Other crops	4	13					
Tillable pasture	22	34					
Idle	22	38					
Total Tillable Acres	75	279					

Average crop acres and yields compiled for the region are for the farms reporting each crop. Yields of forage crops have been converted to tons of dry matter using dry matter coefficients reported by the farmers. Grain production has been converted to bushels of dry grain equivalent based on dry matter information provided.

The following measures of crop management indicate the relationship between forage production, forage production resources and the dairy herd.

CROP MANAGEMENT FACTORS
76 Northern New York Dairy Farms, 1989

Item	Average	My Farm
Total tillable acres per cow	3.25	
Total forage acres per cow	2.80	
Harvested forage dry matter, tons per cow	8.71	

#### Cropping Analysis (continued)

A substantial number of cooperators have allocated crop expenses among the hay crop, corn, and other crops produced. Fertilizer and lime, seeds and plants, and spray and other crop expenses have been computed per acre and per production unit for hay and corn. Additional expense items such as fuels, labor, and machinery repairs are not included.

CROP RELATED ACCRUAL EXPENSES
Northern New York Dairy Farms Reporting, 1989

	Total Per	Hay	Crop	All Corn	Corn Silage	Corn Grain
	Till.	Per	Per	Per	Per Ton	Per Dry
Item	Acre	Acre	Ton DM	Acre	DM	Shell Bu.
Number of farms						
reporting	75		43	35		
Average number						
of acres	279	_	L64	80		
Fertilizer & lime \$	25.57	\$ 18.49	\$ 8.15	\$ 57.56	•	\$ 0.64
Seeds & plants	9.22	6.24	2.75	20.07	4.23	0.22
Spray & other crop						
expense	<u>9.89</u>	5,55	2.44	<u>25.89</u>		0.29
Total	44.68	\$ 30.28	\$ 13.35	\$ 103.52	\$ 21.83	\$ 1.16
My Farm:						
	•	^	^	ć	ć	ė
Fertilizer & lime	\$	\$	\$	٩	٩	Ψ
Seeds & plants				-		
Spray & other crop						
expense				è	è	\$
Total	\$	₹	₹	٩	٩	Ψ

Most machinery costs are associated with crop production and should be analyzed with the crop enterprise. Total machinery expenses include the major fixed costs (interest and depreciation), as well as the accrual operating costs. Although machinery costs have not been allocated to individual crops, they are shown below per total tillable acre.

ACCRUAL MACHINERY EXPENSES
76 Northern New York Dairy Farms, 1989

	Ave:	rage	My Farm		
Machinery	Total	Per Til.	Total	Per Til	
Expense Item	Expenses_	Acre	Expenses	Acre	
Fuel, oil & grease	\$ 4,661	\$ 16.71	\$	\$	
Machinery repairs & parts	11,353	40.72	-		
Machine hire, rent & lease	1,961	7.03			
Auto expense (farm share)	618	2.22			
Interest (5%)	5,236	18.78			
Depreciation	14,291	51.25			
Total	\$ 38,119	\$ 136.71	\$	\$	

#### Dairy Analysis

Analysis of the dairy enterprise can tell a great deal about the strengths and weaknesses of the dairy farm business. Information on this page should be used in conjunction with DHI and other dairy production information. Changes in dairy herd size and market values that occur during the year are identified in the table below. The change in inventory value without appreciation is attributed to physical changes in herd size and quality. Any change in inventory is included as an accrual farm receipt when calculating all of the profitability measures on pages 6 and 7.

DAIRY HERD INVENTORY
76 Northern New York Dairy Farms, 1989

	De	iry Cows			Heifers		
			Bred	(	Open	Ca	<u>lves</u>
<u>Item</u>	No.	Value	No. Value	No.	Value	No.	Value
Beg. year (owned)	86	\$ 80,137	24 \$ 17,980	23 \$	10,078	24 \$	5,453
+ Change w/o apprec.		1,689	1,519		1,006		-308
+ Appreciation		<u>7,089</u>	2,117		1,140	_	473
End year (owned)	87	\$ 88,915	26 \$ 21,616	25 \$	12,224	22 \$	5,618
End incl. leased	87						
Average number	86		71 (all ag	e grou	ps)		
My Farm:							
Beg. of year (owned)		\$	\$		\$		\$
+ Change w/o apprec.		-					
+ Appreciation							
End of year (owned)		\$	\$		\$	***************************************	\$
End including leased							
Average number			(all ag	e grou	ps)		

Total milk sold and milk sold per cow are extremely valuable measures of productivity on the dairy farm. These measures of milk output are based on pounds of milk marketed during the year. Farm managers on DHI should compare milk sold per cow with their rolling herd average on the test date nearest December 31 to see how close the DHI estimate of milk produced is to actual milk sales.

MILK PRODUCTION
76 Northern New York Dairy Farms, 1989

Item	Average	My Farm
Total milk sold, lbs.	1,439,270	
Milk sold per cow, lbs.	16,790	
Average milk plant test, percent butterfat	3.71	

The cost of producing milk has been compiled using the whole farm method and is featured in the following table. Accrual receipts from milk sales can be compared with the accrual costs of producing milk per cow and per hundredweight of milk. Using the whole farm method, operating costs of producing milk are estimated by deducting nonmilk accrual receipts from total accrual operating expenses including expansion livestock purchased. Total costs of producing milk include the operating costs of producing milk plus depreciation on machinery and buildings, the value of operators' labor and management, and the interest charge for using equity capital. Note that the cost of labor, management, and equity capital has been excluded in the intermediate calculation.

ACCRUAL RECEIPTS FROM DAIRY AND COST OF PRODUCING MILK 76 Northern New York Dairy Farms, 1989

		Average					My Farm			
Item	Total	P	er Cow	P	er Cwt.	Total	Per Cow	Per Cwt.		
Accrual Costs of Producing Milk Operating costs Total costs w/o opers' labor,	\$141,564	\$	1,651	\$	9.84	\$	\$	\$		
mgmt. & capital Total Costs Accrual Receipts From Milk		\$	2,418	\$		\$ \$ \$	\$ \$	\$ \$ \$		

The accrual operating expenses most commonly associated with the dairy enterprise are listed in the table below. Evaluating these costs per unit of production enables an evaluation of the dairy enterprise.

DAIRY RELATED ACCRUAL EXPENSES
76 Northern New York Dairy Farms, 1989

			Average		My	My Farm	
<u>Item</u>	Pe	r Cow		Per Cwt.	Per Cow	Per Cwt	
Purchased dairy grain							
& concentrates	\$	655	\$	3.90	\$	\$	
Purchased dairy roughage	•	23	,	0.14		,	
Total Purchased					***************************************		
Dairy Feed	\$	677	\$	4.03	\$	\$	
Purchased grain & conc.	•		•			*	
as % of milk receipts			27%			8	
Purchased feed & crop exp.	\$	823	\$	4.90	\$	\$	
Purchased feed & crop exp.	•		•		*	*	
as % of milk receipts			34%			*	
Breeding	\$	30	\$	0.18	\$ -	\$	
Veterinary & medicine	•	45	•	0.27	***************************************	*	
Milk marketing		51		0.31		<u> </u>	
Cattle lease		5		0.03		#*************************************	
Other livestock expense		108		0.64			

#### Capital and Labor Efficiency Analysis

Capital efficiency factors measure how intensively the capital is being used in the farm business. Measures of labor efficiency are key indicators of management's success in generating products per unit of labor input.

CAPITAL EFFICIENCY
76 Northern New York Dairy Farms, 1989

Item	Per Worker	Per Cow	Per Tillable Acre	Per Tillable Acre Owned
Farm capital Real estate Machinery & equipment	\$176,453 36,630	\$ 5,920 2,505 1,229	\$ 1,820 378	\$ 2,563 1,084
Capital turnover, years  My Farm:				
Farm capital Real estate Machinery & equipment Capital turnover, years	\$	\$	\$	\$
LABO	R FORCE INVE			

Labor Force	Months	Age	Years of of Educ.	Value of Labor & Mgmt.
Operator number 1	12	43	14	\$ 20,204
Operator number 2	4	37	13	4,966
Operator number 3	1	31	12	1,132
Family paid	4			·
Family unpaid	3			
Hired	11			
Total	35	÷ 12 =	2.88 Worker E 1.35 Operator	Equivalent :/Manager Equiv.

 My Farm:
 Total
 + 12 = \_\_\_\_\_\_
 Worker Equivalent

 Operator's
 + 12 = \_\_\_\_\_\_
 Operator/Manager Equiv.

Labor	Av	erage	My Farm		
Efficiency	Total	Per Worker	Total	Per Worker	
Cows, average number	86	30			
Milk sold, pounds	1,439,270	500,425			
Tillable acres	279	97			
Work units	913	318			

		Average				My Far	m
		P	er	Per		Per	Per
Labor Costs	<u>Total</u>	C	ow	Til, Acre	Total	Cow	Til, Acre
Value of operator(s)							
labor (\$1,050/mo.)	\$ 17,062	\$	199	\$61.19	\$	\$	\$
Family unpd. (\$750/mo.	) 2,516	-	29	9.03			
Hired	17.817		208	<u>63.90</u>		*	
Total Labor	\$ 37,396	\$	436	\$134.12	\$	\$	\$
Machinery Cost	\$ 38,119	\$	445	\$136.71	\$	\$	\$
Total Labor & Mach.	\$ 75,515	\$	881	\$270.83	\$	\$	\$

#### COMPARATIVE ANALYSIS OF THE FARM BUSINESS

#### Progress of the Farm Business

Comparing your business with average data from regional DFBS cooperators that participated in both of the last two years is one part of a business checkup. It is equally important for you to determine the progress your business has made over the past two or three years and to set targets or goals for the future.

PROGRESS OF THE FARM BUSINESS Same 54 Northern New York Dairy Farms, 1988 and 1989

	Av	erage of	54	4 Farms*		My Farm		
Selected Factors		1988		1989		1988	1989	Goal
Size of Business								
Average number of cows		82		82				
Average number of heifers		67		67	_			
•		355,032	1.	375,083				
Worker equivalent	•	2.66		2.67	_			
Total tillable acres		256		260	_			
Rates of Production								
Milk sold per cow, lbs.		16,619		16,762				
Hay DM per acre, tons		2.28		2.36	-			
Corn silage per acre, tons	;	14		15				
Labor Efficiency								
Cows per worker		31		31				
Milk sold/worker, lbs.		509,908		515,060	_			
Cost_Control								
Grain & conc. purchased								
as % of milk sales		27%		279		- %	9.	
Dairy feed & crop exp.		276		2.70	-			
per cwt. milk	\$	4.37	Ś	4.80	Ś		Ś	Ś
Labor & mach. costs/cow	\$	825	\$	4.80 877	\$_ \$_		\$ \$	\$
Capital Efficiency**								
Farm capital per cow	Ś	5 536	Ś	6,054	Ś		Ś	Ś
Mach. & equip, per cow				1,241	Š-		\$\$	Š
Capital turnover, years	٧	2.17		2.02	Ψ_		Υ	Υ
Profitability								
Net farm inc. w/o apprec.	¢	26 0/6	Ċ	40 423	ė		¢	ė
Net farm inc. w/apprec.	Ý	20,040	ې خ	61 022	خ		\$ \$	3
	Ą	39,392	Ş	01,022	₽_		۶	٧
Labor & mgt. income	۵	7 665	٨	17 711	٠		\$	ć
per oper./manager Rate of return on eq.	Ş	7,003	Þ	1/,/11	₽_		₹	\$
		/. aaa		10 200		^		
capital w/apprec. Rate of return on all		4.20%		10.30%				
		/ 050		0.050		_	_	
capital w/apprec.		4.95%		9.85%				*
Financial Summary								
Farm net worth, end year	\$	296,863	\$	351,473	\$		\$	\$
Debt to asset ratio		0.36			•		* 4	·
Farm debt per cow				1,950	\$		\$	\$
<b>.</b>	T	-,	•	_,,-	٠.		1	1

<sup>\*</sup>Farms participating both years. \*\*Average for the year.

#### Farm Business Charts

The Farm Business Chart is a tool which can be used in analyzing a business by drawing a line through the figure in each column which represents the current level of management performance. The figure at the top of each column is the average of the top 10 percent of the 406 farms for that factor. The other figures in each column are the average for the second 10 percent, third 10 percent, etc. Each column of the chart is independent of the others. The farms which are in the top 10 percent for one factor would not necessarily be the same farms which make up the top 10 percent for any other factor.

The cost control factors are ranked from low to high, but the <u>lowest cost</u> is not necessarily the most profitable. In some cases, the "best" management position is somewhere near the middle or average. Many things affect the level of costs, and must be taken into account when analyzing the factors.

References to DFBS output page numbers for participating dairy farmers are provided in the table headings.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS
406 New York Dairy Farms, 1988

Size of Business			Rates	of Produ	ction	Labor E	Efficiency
Worker	No.	Pounds	Pounds	Tons	Tons Corn	Cows	Pounds
Equiv-	of	Milk	Milk Sold	Hay Crop	Silage	Per	Milk Sold
<u>alent</u>	Cows	Sold	Per Cow	DM/Acre	Per Acre	Worker	Per Worker
(DFBS							
pg. 10)	(10)	(10)	(9)	(8)	(8)	(10)	(10)
7.6	302	5,478,274	20,561	4.2	21	50	832,165
4.5	150	2,555,561	18,872	3.5	18	40	666,980
3.6	118	1,965,272	18,058	3.1	16	36	603,280
3.2	99	1,667,766	17,409	2.9	15	33	561,713
2.9	84	1,377,121	16,886	2.6	15	31	514,877
2.6	72	1,156,002	16,298	2,4	14	29	467,076
2.3	62	1,000,552	15,785	2.2	13	27	432,494
2.1	55	857,485	15,024	2.0	12	25	397,092
1.9	47	716,763	14,142	1.7	11	22	347,768
1.3	36	542,182	11,650	1.2	8	17	266,376

Cost	Control
COSE	COHCLOI

Grain Bought	% Feed is of Milk	Machinery Costs	Labor & Machinery	Feed & Crop Expenses	Feed & Crop Expenses Per
Per Cow	<u>Receipts</u>	Per Cow	Costs Per Cow	Per Cow	<u>Cwt. Milk</u>
(9)	(9)	(10)	(10)	(9)	(9)
\$286	14%	\$219	\$ 500	\$ 449	\$3.00
401	20	282	618	564	3.64
463	23	324	682	623	3.93
522	26	358	726	678	4.22
572	27	387	763	735	4.49
615	29	415	805	785	4.71
655	31	442	854	824	4.94
700	32	480	919	874	5.19
767	35	539	1,000	939	5.54
886	39	664	1,142	1,086	6.47

The next section of the Farm Business Chart provides for comparative analysis of the value and costs of dairy production.

The profitability section shows the variation in farm income by decile and enables a dairy farmer to determine where he or she ranks by using several measures of farm profitability. Remember that each column is independently established and the farms making up the top decile in the first column will not necessarily be on the top of any other column. The dairy farmer who ranks at or near the top of most of these columns is in a very enviable position.

## FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS 406 New York Dairy Farms, 1988

Dairy Receipts Per Cow	Dairy Receipts Per Cwt.	Oper. Cost Milk Per Cow	Oper. Cost Milk Per Cwt.	Total Cost Production Per Cow	Total Cost Production Per Cwt.
(9)	(9)	(9)	(9)	(9)	(9)
\$2,974	\$16.53	\$ 878	\$ 5.97	\$1,697	\$11.22
2.723	15.33	1,170	7.50	1,980	12.42
2,594	14.89	1,309	8.18	2,092	13.03
2,496	14.62	1,409	8.72	2,206	13.45
2,413	14.37	1,506	9.19	2,303	13.85
2,339	14.17	1,588	9,62	2,383	14.45
2,251	13.98	1,671	10.06	2,489	14,93
2,149	13.72	1,775	10.51	2,613	15.68
1,984	13.30	1,923	11.11	2,749	16.59
1,663	12.65	2,122	12.96	3,085	19.26

#### Profitability

		Return to Oper	ator's Labor,	Lal	Labor &		
Net Farm	Income	Management, &	<b>Equity Capital</b>	Managem	ent Income		
With	Without	With	Without	Per	Per		
<u>Appreciation</u>	Appreciation	Appreciation	Appreciation	Farm	<u>Operator</u>		
(3)	(3)	(3)	(3)	(3)	(3)		
\$191,562	\$152,016	\$190,109	\$150,408	\$100,436	\$82,939		
91,674	64,178	89,579	62,028	36,434	27,820		
71,488	47,392	69,860	45,854	25,726	19,437		
59,330	39,075	57,028	37,325	19,032	14,022		
48,938	32,619	47,001	30,813	13,156	10,174		
40,055	25,596	38,398	24,169	7,890	6,156		
32,386	20,332	30,714	17,339	2,740	2,308		
24,193	13,859	21,562	11,857	-4,487	-3,781		
16,077	6,208	13,720	3,924	-11,265	-9,151		
<b>-</b> 5	-11,890	-1,766	-13,815	-33,523	-34,040		

Farm Business Charts for farms with freestall barns and 120 cows or less and more than 120 cows, and farms with conventional barns with 60 cows or less and more than 60 cows are discussed in the section on pages 23-28.

#### Financial Analysis Chart

The farm financial analysis chart is designed just like the <u>Farm Business</u> <u>Chart</u> and may be used to measure the financial health of the farm business. Most of the financial measures used in the chart are defined on pages 7, 10, 12, and 18 of this publication. References to DFBS output page numbers for participating dairy farmers are provided in the table headings.

FINANCIAL ANALYSIS CHART 406 New York Dairy Farms, 1988

	Liqu	idity (repayment	:)	
	Debt Payments	Cash Flow	Available for	
Debt Payments	as Percent	Coverage	Debt Service	Debt
Made Per Cow	of Milk Receipts	Ratio	Per Cow	Per Cow
(DFBS pg. 7)	(7)	(7)	(11)	(5)
\$ 61	3₺	5.65	\$845	\$ 112
203	9	1.84	660	660
293	14	1.42	572	1,196
373	18	1.21	510	1,585
435	20	1.09	462	1,941
494	23	0.96	415	2,264
563	27	0.83	361	2,630
639	31	0.68	300	2,995
742	36	0.52	222	3,465
1,161	59	-0.29	-23	4,687

	Solvency		Efficiency & Profitability			
	<u>Debt/Asset R</u>	Debt/Asset Ratio		Capital	Rate of	
Percent	Current &	Long	Farm Cap.	Turnover	Return on	
Equity	<u> Intermediate</u>	Term	Per Cow	(years)	Equity Cap.	
(DFBS						
pg. 5)	(5)	(5)	(10)	(10)	(3)	
98%	0.01	0.00	\$4,110	1.51	25%	
90	0.04	0.01	4,849	1.81	13	
82	0.10	0.12	5,231	1.98	10	
75	0.17	0.24	5,620	2.13	8	
69	0.23	0.33	5,989	2.29	6	
65	0.29	0.45	6,334	2.43	4	
58	0.36	0.54	6,806	2.56	2	
52	0.41	0.63	7,358	2.73	0	
43	0.50	0.77	8,214	3.05	-4	
28	0.73	1.20	10,357	3.91	-16	

#### Summarize Your Business Performance

The Farm Business and Financial Analysis Charts can be used to help identify strengths and weaknesses of your farm business. Identify three major strengths and three areas of your farm business that need improvement.

Strengths:	Need Improvement:

#### Comparisons by Type of Barn and Herd Size

When analyzing a dairy farm business by comparing it to a group of farms, it is important that the group of farms used has as many of the same physical characteristics as possible as the farm being analyzed. To assist in this endeavor, dairy farms in the 1988 State Summary¹ have been divided into those with freestall and those with conventional housing. Within each group is a further classification by size of the dairy herd.

The table on page 24 shows the average values for the resulting four groups of dairy farms. Within each housing type, the larger herd size has the highest crop yields and pounds of milk sold per cow. The total cost of producing milk was lower on the larger farms and labor efficiency greater. Profitability was also greater on the larger farms within each housing type.

Farm business charts have been computed for each of the four housing and herd size categories. References to DFBS output page numbers for participating dairy farmers are provided in the table headings. From these charts on pages 25-28 the range in size of business, rates of production, labor efficiency, value and cost of producing milk, and profitability can be observed. The range in every category of business performance is tremendous.

By comparing the farm's performance on the most appropriate business chart, a farm manager will be better able to evaluate his or her business performance. Farm managers should remember, however, that their competition is not limited to the other farms in their own barn type and herd size category. They should observe how their management performance compares with farms in other categories as well.

#### Herd Size Comparisons

A detailed comparison of profitability, financial situation, and business analysis factors across herd sizes is contained on pages 29-36. As herd size increases, the average profitability also increases (pages 29-30). Net farm income without appreciation was \$233,809 per farm for the 300 or more herd size group and \$12,875 per farm for those with less than 40 cows. This relationship holds for all measures of profitability including rate of return on equity capital.

As herd size increases, percent equity generally decreases (pages 31-34). However, farm net worth increases substantially as herd size increases. The average net worth for all size farms increased during 1988.

Crop yields generally increased as herd size increased, but fertilizer and lime expenses and machinery cost per tillable acre also increased (pages 35-36). Milk sold per cow generally increased as herd size increased, ranging from 15,833 pounds on the farms with 40 to 54 cows to 19,113 pounds on farms with 300 or more cows. Farm capital per worker increased as herd size increased, while farm capital per cow decreased as herd size increased. Cows per worker increased dramatically as herd size increased, ranging from 20 at the lowest herd size category up to 45 at the largest size category.

<sup>&</sup>lt;sup>1</sup>Smith, Stuart F., Wayne A. Knoblauch, and Linda D. Putnam, <u>Dairy Farm Management Business Summary</u>, New York, <u>1988</u>, Department of Agricultural Economics, Cornell University, A.E. Res. 89-12, August 1989.

### SELECTED BUSINESS FACTORS BY TYPE OF BARN AND HERD SIZE

406 New York Dairy Farms, 1988

		raims, 1908	Frees	11
Farms with:	Convent ≤60 Cows	>60 Cows	<u>Frees</u> ≤120 Cows	
		Access Access to the control of the		
Number of farms	117	139	65	85
Cropping Program Analysis	4.0	222	252	570
Total Tillable acres	149	292	259	560
Tillable acres rented*	45	98	85	209
Hay crop acres*	96	168	133	237
Corn silage acres*	28	55	59	181
Hay crop, tons DM/acre	2.2	2.5	2.5 14.7	2.9 14.3
Corn silage, tons/acre	12.8 39.4	14.0 48.7	40.9	45.3
Oats, bushels/acre	7.3	7.8	7.5	7.2
Forage DM per cow, tons Tillable acres/cow	3.2	3.4	3.1	2.6
Fert. & lime exp./til. acre	\$21.87	\$24.92	\$29.68	\$34.57
Total machinery costs	\$18,754	\$35,266	\$37,311	\$82,010
Machinery cost/tillable acre	\$126	\$121	\$144	\$146
	4223	4	7	<b>4</b> 2.5
Dairy Analysis				
Number of cows	46	87	84	217
Number of heifers	35	72	69	171
Milk sold, lbs.	745,373	1,428,224	1,381,093	3,797,957
Milk sold/cow, 1bs.	16,150	16,485	16,496	17,468
Operating cost of prod. milk/cwt.	-	\$9.25	\$9.36	\$9.64
Total cost of prod. milk/cwt.	\$15.35	\$13.97	\$14.14	\$12.88
Price/cwt. milk sold	\$12.90	\$12.88	\$13.03	\$13.15
Purchased dairy feed/cow	\$620	\$587	\$608	\$660
Purchased dairy feed/cwt. milk	\$3.84	\$3.56	\$3.68	\$3.78
Purc. grain & conc. as % milk red Purc. feed & crop exp./cwt. milk	28% \$4.59	27% \$4.47	27% \$4.67	289 \$4.70
rate. reed a crop exp./ewt. mirk	γ <del>-1</del> .32	<b>4</b> 4.47	φ4.07	<b>γ</b> 4.70
Capital Efficiency				
Farm capital/worker	\$165,397	\$190,032	\$191,181	\$220,397
Farm capital/cow	\$6,874	\$6,367	\$6,391	\$5,688
Farm capital/til. acre owned	\$3,050	\$2,829	\$3,075	\$3,523
Real estate/cow	\$3,637	\$3,056	\$2,944	\$2,574
Machinery investment/cow	\$1,242	\$1,186	\$1,264	\$915
Capital turnover, years	2.58	2.38	2.33	1.97
Labor Efficiency				
Worker equivalent	1.92	2.90	2.80	5.61
Operator/manager equivalent	1.17	1.44	1.40	1.43
Milk sold/worker, lbs.	388,601	492,003	493,473	676,903
Cows/worker	24	30	30	39
Work units/worker	252	325	322	395
Labor cost/cow	\$427	\$390	\$388	\$431
Labor cost/tillable acre	\$132	\$115	\$126	\$167
Profitability & Palance Chart And	almaia			
Profitability & Balance Sheet Ana Net farm income (w/o apprec.)	\$1 <u>ys1s</u> \$15,113	\$32,593	\$31,035	\$86,118
Labor & mgmt. income/operator	\$2,387	\$8,213	\$8,928	\$31,202
Farm debt/cow	\$2,367 \$2,424	\$1,935	\$2,265	\$31,202
Percent equity	65%	70%	\$2,265 65%	\$2,018 65 <del>8</del>
Tozoone equity	0.74	/ 0 16	974	0.51

<sup>\*</sup>Average of all farms, not only those reporting data.

FARM BUSINESS CHART FOR SMALL CONVENTIONAL STALL DAIRY FARM 117 Conventional Stall Dairy Farms with 60 or Less Cows, New York, 1988

Size of Business		iness	Rates	Rates of Production			Labor Efficiency		
Worker	No.	Pounds	Pounds	Tons	Tons Corn	Cows	Pounds		
Equiv-	of	Milk	Milk Sold	Hay Crop	Silage	Per	Milk Sold		
alent	Cows	Sold	Per Cow	DM/Acre	Per Acre	Worker	<u>Per Worker</u>		
(DFBS									
pg. 10)	(10)	(10)	(9)	(8)	(8)	(10)	(10)		
3.0	58	1,069,621	20,399	3.8	20	40	672,046		
2.4	56	952,284	18,512	3.1	18	33	562,928		
2.2	54	883,230	17,716	2.8	17	29	469,994		
2.1	51	828,725	17,216	2.6	15	27	433,894		
2.0	49	760,558	16,604	2.4	14	25	414,271		
2.0	46	716,896	16,054	2,3	13	24	385,463		
1.7	43	676,549	15,273	2.0	12	23	353,856		
1.5	40	628,044	14,721	1.9	10	21	330,435		
1.3	37	566,471	13,809	1.7	10	19	292,749		
1.0	29	427,103	11,901	1.2	77	15	226,460		

		Cos	t Control		
Grain	% Feed is	Machinery	Labor &	Feed & Crop	Feed & Crop
Bought	of Milk	Costs	Machinery	Expenses	Expenses Per
Per Cow	Receipts	Per Cow	Costs Per Cow	Per Cow	Cwt. Milk
(9)	(9)	(10)	(10)	(9)	(9)
\$318	23%	\$197	\$ 554	\$ 455	\$3.02
418	28	250	692	550	3.57
466	31	315	755	600	3.93
518	33	364	804	644	4.22
554	35	392	841	713	4.47
593	36	426	899	759	4.68
641	38	451	941	812	4.90
710	40	488	1,013	872	5.18
781	44	538	1,069	952	5.58

1,192

1,092

6.70

647

896

50

Value and Cost of Production			Profitability			
Milk	Oper. Cost	Total Cost	Net Farm	n Income		
Receipts	Milk	Production	With	Without	Labor & Mg	mt. Income
Per Cow	Per Cwt.	Per Cwt.	Apprec.	Apprec.	Per Farm	Per Oper.
(9)	(9)	(9)	(3)	(3)	(3)	(3)
\$2,631	\$ 6.23	\$12.22	\$66,048	\$40,605	\$26,515	\$25,175
2,411	7.69	13.25	45,717	31,042	18,240	15,171
2,289	8.23	14.00	38,199	24,592	12,447	10,259
2,200	8.68	14.57	31,413	20,824	8,024	6,890
2,122	9.22	15.09	27,367	16,987	5,314	4,522
2,064	9.64	15.62	22,397	13,416	2,240	2,113
1,975	10.09	16.24	19,247	9,008	-1,921	-1,703
1,886	10.53	16.70	16,846	6,522	-5,605	-5,125
1,756	11.26	17.41	10,388	2,017	-9,948	-8,298
1,545	13.48	21.06	-402	-9,679	-24,960	-21,802

FARM BUSINESS CHART FOR LARGE CONVENTIONAL STALL DAIRY FARMS
139 Conventional Stall Dairy Farms with More Than 60 Cows, New York, 1988

Size of Business		Rates	Rates of Production			Labor Efficiency	
Worker	No.	Pounds	Pounds	Tons	Tons Corn	Cows	Pounds
Equiv-	of	Milk	Milk Sold	Hay Crop	Silage	Per	Milk Sold
alent	Cows	Sold	Per Cow	DM/Acre	Per Acre	Worker	Per Worker
(DFBS							
Pg. 10)	(10)	(10)	(9)	(8)	(8)	(10)	(10)
4.7	141	2,455,689	19,800	4.1	21	47	755,830
3.7	112	1,887,601	18,638	3.5	17	38	651,861
3.3	98	1,724,659	18,106	3.1	16	35	591,353
3.1	93	1,531,719	17,463	2.8	15	33	541,449
2.9	83	1,396,207	16,959	2.6	15	31	510,816
2.6	 78	1,286,389	16,331	2.4	14	29	476,869
2.5	73	1,172,462	15,846	2.2	13	28	445,549
2.4	67	1,086,160	15,340	2.0	12	26	410,818
2.1	64	992,080	14,294	1.7	11	23	373,760
1.8	61	822,664	11,490	1.2	8	19	293,815

		Cos	t Control		
Grain	% Feed is	Machinery	Labor &	Feed & Crop	Feed & Crop
Bought	of Milk	Costs	Machinery	Expenses	Expenses Per
Per Cow	Receipts	Per Cow	Costs Per Cow	Per Cow	Cwt. Milk
(9)	(9)	(10)	(10)	(9)	(9)
\$272	24%	\$221	\$526	\$429	\$3.01
371	28	285	647	541	3.57
433	30	327	698	607	3.82
502	32	358	750	658	4.02
565	33	391	787	701	4.27
605	35	418	838	751	4.53
648	37	441	879	801	4.77
700	39	475	939	847	5.03
757	41	519	1,035	915	5.36
883	48	660	1,173	1,068	6.14

Value and Cost of Production			Profitability			
Milk	Oper. Cost	Total Cost	Net Fari	n Income		
Receipts	Milk	Production	With	Without	Labor & Mg	mt. Income
Per Cow	Per Cwt.	Per Cwt.	Apprec.	Apprec.	Per Farm	Per_Oper.
(9)	(9)	(9)	(3)	(3)	(3)	(3)
\$2,590	\$ 6.33	\$11.06	\$113,623	\$69,808	\$45,158	\$40,726
2,425	7.33	12.27	79,373	54,563	33,225	23,975
2,339	7.95	12.97	67,707	46,491	26,185	19,075
2,256	8.42	13.28	59,750	41,639	20,956	15,497
2,174	8.91	13.58	51,694	35,314	16,765	11,634
2,120	9.27	14.05	46,333	31,497	11,988	8,446
2,024	9.76	14.55	40,463	26,457	6,807	4,985
1,940	10.27	15.13	34,299	21,668	-1,047	-585
1,820	10.94	16.09	24,116	11,595	-9,842	-7,205
1,480	12.89	18.79	2,703	-10,487	-30,954	-21,750

FARM BUSINESS CHART FOR SMALL FREESTALL DAIRY FARMS
65 Freestall Barn Dairy Farms with 120 or Less Cows, New York, 1988

Size	of Bus	of Business Rates of Production Labor Effi			Rates of Production		
Worker	No.	Pounds	Pounds	Tons	Tons Corn	Cows	Pounds
Equiv-	of	Milk	Milk Sold	Hay Crop	Silage	Per	Milk Sold
alent	Cows	Sold	Per Cow	DM/Acre	Per Acre	Worker	<u>Per Worker</u>
(DFBS							
pg. 10)	(10)	(10)	(9)	(8)	(8)	(10)	(10)
4.2	115	2,135,755	20,957	3.9	21	46	738,383
3.5	108	1,909,121	19,580	3.4	20	39	637,748
3.3	105	1,771,060	18,347	3.1	18	36	582,787
3.1	100	1,688,234	17,512	2.9	16	34	559,711
3.0	92	1,505,063	16,867	2.8	15	31	525,414
2.8	84	1,365,945	16,271	2.5	15	29	474,472
2.6	78	1,191,775	15,778	2.3	14	28	455,536
2.3	70	1,061,328	14,891	2.0	12	27	429,339
2.1	59	872,566	13,601	1.6	11	25	376,468
1.6	42	610,624	11,393	1.1	8	18	277,940

	Cost Control										
Grain	% Feed is	Machinery	Labor &	Feed & Crop	Feed & Crop						
Bought	of Milk	Costs	Machinery	Expenses	Expenses Per						
Per Cow	Receipts	Per Cow	Costs Per Cow	Per Cow	Cwt, Milk						
(9)	(9)	(10)	(10)	(9)	(9)						
\$258	23%	\$234	\$ 530	\$ 480	\$2.91						
416	28	302	662	587	3.65						
454	31	346	719	629	3.98						
511	35	369	767	685	4.47						
583	37	396	807	761	4.78						

1,036

1,153

1,344

1,152

5.00

5.28

5.51

5.89

6.95

Value	and Cost of Pr	oduction		Prof	itability	
Milk Receipts	Oper. Cost Milk	Total Cost Production	Net Farm	m Income Without	Labor & Mg	mt. Income
Per Cow	Per Cwt.	Per Cwt.	Apprec.	Apprec.	Per Farm	Per Oper.
(9)	(9)	(9)	(3)	(3)	(3)	(3)
\$2,677	\$ 5.99	\$11.76	\$122,057	\$80,538	\$50,935	\$41,222
2,502	7.65	12.36	86,612	59,942	36,940	28,176
2,361	8.34	13.01	72,241	46,332	27,220	20,081
2,269	8.71	13.42	60,248	40,507	22,245	14,792
2,175	9.29	14.01	51,410	36,770	16,212	11,783
2,106	9.77	14.68	43.786	28.683	12,431	9,286
2,060	10.07	15.56	33,786	21,707	7,906	5,326
1,965	10.61	16.33	22,275	15,781	-1,726	-1,838
1,792	11.56	17.14	11,783	9,142	-10,710	-7,666
1,567	13.45	18.97	226	-13,498	-24,719	-22,741

FARM BUSINESS CHART FOR LARGE FREESTALL DAIRY FARMS 85 Freestall Barn Dairy Farms with More Than 120 Cows, New York, 1988

Size	of Bu	siness	Rates	of Produ	ction	Labor	Efficiency
Worker	No.	Pounds	Pounds	Tons	Tons Corn	Cows	Pounds
Equiv-	of	Milk	Milk Sold	Hay Crop	Silage	Per	Milk Sold
alent	Cows	Sold_	Per Cow	DM/Acre	Per Acre	Worker	Per Worker
(DFBS							
pg. 10)	(10)	(10)	(9)	(8)	(8)	(10)	(10)
12.1	532	10,258,979	21,283	4.8	19	60	1,027,141
7.7	309	5,748,053	19,739	4.1	18	47	839,146
6.5	253	4,450,040	18,818	3.8	17	44	742,700
6.0	224	3,683,829	17,827	3.4	16	41	685,010
5.4	194	3,237,071	17,274	3.1	15	39	648,889
4.8	173	2,920,311	16,940	2.9	14	37	613,465
4.2	153	2,550,953	16,266	2.6	13	34	579,478
3.9	136	2,313,893	15,745	2.4	12	33	555,146
3.6	127	2,088,296	14,707	2.1	11	31	510,554
2.9	121	1,660,164	12,411	1.5	10	27	423,675

	Cost Control										
Grain % Feed is Bought of Milk Per Cow Receipts		Machinery	Labor &	Feed & Crop	Feed & Crop						
		Costs	Machinery	Expenses	Expenses Per						
		Per Cow	Costs Per Cow	Per Cow	Cwt. Milk						
(9)	(9)	(10)	(10)	(9)	(9)						
\$316	24%	\$263	\$ 543	\$ 487	\$3.17						
454	30	295	642	644	3.97						
527	32	320	726	737	4.32						
587	34	349	756	775	4.53						
623	36	382	784	811	4.71						
653	37	407	831	839	4.91						
675	39	423	900	869	5.13						
702	41	453	947	912	5.30						
776	42	507	989	949	5.60						
897	47	617	1,093	1,057	6.31						

<u>Value</u>	and Cost of Pr	oduction	<u>Profitability</u>			
Milk	Oper. Cost	Total Cost	<u>Net Far</u>	m Income	-	
Receipts	Milk	Production	With	Without	Labor & Mg	mt. Income
Per Cow	Per Cwt.	Per Cwt.	Apprec,	Apprec.	Per Farm	Per Oper.
(9)	(9)	(9)	(3)	(3)	(3)	(3)
\$2,767	\$ 5.23	\$10.40	\$367,659	\$308,013	\$225,699	\$195,726
2,585	7.66	11.77	223,987	166,492	115,331	74,508
2,466	8.92	12,33	158,470	114,554	69,277	48,997
2,365	9.39	12.87	123,985	87,002	50,003	37,563
2,293	9.85	13.20	105,605	71,945	39,841	24,763
2,232	10.29	13.63	90,906	62,101	27,489	18,851
2,145	10.51	13.88	74,583	44,749	15,425	12,052
2,045	10.77	14.36	63,368	33,199	-177	133
1,949	11.11	14.85	41,941	20,940	-15,048	-12,035
1,650	12.23	16.60	12,620	-12,543	-50,857	-43,219

### FARM BUSINESS SUMMARY BY HERD SIZE 406 New York Dairy Farms, 1988

	Less than	40 to	55 to	70 to	85 to
Item Farm Size:	40 Cows	54 Cows	69 Cows	84 Cows	99 Cows
Number of farms	29	67	81	53	36
ACCRUAL EXPENSES					
Hired labor	\$ 2,392	\$ 4,607	\$ 9,317	\$ 14,404	\$ 19,414
Dairy grain & concentrate	18,877	27,003	34,299	43,702	56,902
Dairy roughage	2,095	1,749	916	1,524	580
Nondairy feed	348	144	263	685	63
Machine hire/rent/lease	915	1,517	1,421	1,436	1,229
Machine repairs/parts	3,293	4,837	7,323	8,357	13,107
Auto expense (farm share)	469	415	687	665	781
Fuel, oil & grease	1,554	2,208	3,423	4,240	5,632
Replacement livestock	1,926	1,023	1,516	1,318	1,523
Breeding	1,104	1,568	2,064	2,436	3,102
Veterinary & medicine	1,269	1,675	2,645	3,397	4,035
Milk marketing	3,505	4,900	5,727	7,365	7,354
Cattle lease/rent	10	52	0	352	14
Other livestock expense	2,963	4,874	5,534	6,974	9,024
Fertilizer & lime	1,698	3,465	5,162	6,944	8,272
Seeds & plants	732	1,340	1,961	2,953	3,680
Spray & other crop expense	718	1,021	1,713	2,178	3,045
Land/building/fence repair	1,398	1,478	2,359	2,200	3,661
Taxes & rent	2,979	5,209	6,374	7,877	8,324
Telephone & electricity	2,877	3,635	4,572	5,304	5,994
Interest paid	6,223	9,444	10,280	12,466	15,535
Misc. (including insurance)	2,576	3,135	4,550	5,601	6,315
Total Operating Expenses	\$59,921	\$ 85,299	\$112,106	\$142,378	\$177,586
Expansion livestock	672	337	176	537	1,253
Machinery depreciation	4,924	6,528	9,639	11,715	15,214
Building depreciation	2,415	3,573	4,964	5,960	6,460
Total Accrual Expenses	\$67,932	\$ 95,737	\$126,885	\$160,590	\$200,513
ACCRUAL_RECEIPTS					
Milk sales	\$69,058	\$ 96,366	\$126,139	\$162,315	\$206,315
Dairy cattle	6,296	7,934	10,340	15,094	18,421
Dairy calves	· ·	•			
Other livestock	1,809 479	2,074 131	2,580 115	2,899 369	3,494 318
Crops	1,936	977	2,558	4,576	4,331
Misc. receipts	1,230	3,258	4,976	5,572	6,316
Total Accrual Receipts	\$80,807	\$110,742	\$146,708	\$190,826	\$239,195
-	• ,	, ,	• •	, - , -	, ,
PROFITABILITY ANALYSIS					
Net farm income (w/o apprec.)		\$15,005	\$19,823	\$30,236	\$38,682
Net farm income (w/apprec.)	\$20,258	\$28,129	\$33,894	\$45,986	\$61,521
Labor & mgmt. income	\$2,331	\$3,228	\$3,284	\$11,721	\$17,960
Number of operators	1.10	1.16	1.36	1.41	1.31
Labor & mgmt. inc./oper.	\$2,119	\$2,782	\$2,415	\$8,313	\$13,710
Rates of return on:					
Equity capital w/o apprec.	-4.3%	-4.0%			2.9%
Equity capital w/apprec.	0.0%	2.8%	2.2%	5.2%	9.1%
All capital w/o apprec.	-0.4%	0.5%	0.6%	2.9%	4.7%
All capital w/apprec.	2.5%	4.7%	3.9%	6.1%	8.9%
			· · · · · · · · · · · · · · · · · · ·		

## FARM BUSINESS SUMMARY BY HERD SIZE 406 New York Dairy Farms, 1988

	100 to	150 to	200 to	300 or
Item Farm Size:	149 Cows	199 Cows	299 Cows	More Cows
Number of farms	81	25	21	13
ACCRUAL EXPENSES				
Hired labor	\$ 25,129	\$ 52,976	\$ 79,337 \$	200,247
Dairy grain & concentrate	68,636	107,553	153,329	323,183
Dairy roughage	1,652	1,725	3,503	11,127
Nondairy feed	301	0	374	2,971
Machine hire/rent/lease	3,137	2,027	3,590	6,976
Machine repairs/parts	14,690	24,337	32,025	44,595
Auto expense (farm share)	606	548	1,040	949
Fuel, oil & grease	7,046	11,674	14,884	22,566
Replacement livestock	1,505	180	12,690	2,072
Breeding	3,404	5,874	6,885	13,345
Veterinary & medicine	4,970	8,862	12,037	29,107
Milk marketing	11,218	16,822	17,375	28,057
Cattle lease/rent	112	864	0	1,700
Other livestock expense	10,996	14,902	21,193	44,593
Fertilizer & lime	10,849	15,467	24,072	30,893
Seeds & plants	4,544	6,168	9,696	12,581
Spray & other crop expense	4,179	5,727	9,390	16,835
Land/building/fence repair	3,965	7,811	10,295	18,413
Taxes & rent	12,154	17,290	16,508	36,340
Telephone & electricity	7,515	10,434	13,990	22,305
Interest paid	20,245	30,488	38,183	82,861
Misc. (including insurance)	7,728	11,427	<u>15,598</u>	<u>27,380</u>
Total Operating Expenses	\$224,581	\$353,156	\$505,994 \$	979,096
Expansion livestock	1,445	2,175	3,046	42,433
Machinery depreciation	16,826	23,211	33,872	51,018
Building depreciation	<u>8,646</u>	<u>13,367</u>	<u>19,946</u>	47,793
Total Accrual Expenses	\$251,498	\$391,909	\$562,858 \$	1,120,340
ACCRUAL RECEIPTS				
Milk sales	\$256,607	\$376,291	\$530,450 \$	1,148,224
Dairy cattle	19,533	33,320	50,614	122,913
Dairy calves	4,526	6,676	10,489	20,435
Other livestock	556	472	2,292	2,655
Crops	6,714	9,520	11,087	26,097
Misc. receipts	<u>10,966</u>	<u> 18,255</u>	<u>27,459</u>	33,826
Total Accrual Receipts	\$298,902	\$444,533	\$632,391 \$	1,354,149
PROFITABILITY ANALYSIS				
Net farm income (w/o apprec.)	\$47,404	\$52,624	\$69,533	\$233,809
Net farm income (w/apprec.)	\$71,193	\$100,639	\$98,371	\$280,953
Labor & mgmt. income	\$20,551	\$16,348	\$25,100	\$162,342
Number of operators	1.48	1.56	1.42	1.47
Labor & mgmt. inc./oper.	\$13,886	\$10,480	\$17,676	\$110,437
Rate of return on:	, ,	,		,
Equity capital w/o apprec.	2.8%	2.5%	3.9%	13.4%
Equity capital w/apprec.	7.6%	9.4%	7.2%	16.8%
All capital w/o apprec.	4.6%	4.6%	5.4%	11.3%
All capital w/apprec.	7.9%	9.2%	7.6%	13.3%

### FARM FAMILY FINANCIAL SITUATION BY HERD SIZE 406 New York Dairy Farms, 1988

Farms with: <u>Less than</u>	40 Cows	40 to 5	4 Cows	55 to 69	Cows
	Dec. 31		Dec. 31		Dec. 31
ASSETS	ć 2 074	6 0 714	6 9 675	ė 2 0/E	\$ 4,036
Farm cash/chkg./sav. \$ 4,457				\$ 3,845	•
Accounts receivable 5,424 Prepaid expenses 0	6,196 15	8,003	9,132 0	10,443 74	11,770 52
	13,321	16,895			
Feed & supplies 11,232 Livestock* 42,673	45,140	56,489			
Machinery & equipment* 43,066	46,651	54,871	57,184	77,112	79,800
FLB & PCA stock 935	912	1,403	1,289		2,629
Other stock & cert. 1,333	1,131	2,194	2,311	3,363	3,660
Land & buildings* 133,717	139,670	163,123		213,256	223,496
Total Farm Assets \$242,837	\$256,110	\$305,692		\$416,659	\$437,350
	, ,				
Pers. cash/chkg./sav.\$ 1,701		\$ 2,898		\$ 8,002	\$ 9,051
Cash value of life ins. 1,045	1,171	2,772	3,806	3,668	3,967
Nonfarm real estate 17,714	20,095	2,772 29,421 2,892	34,017	34,463	37,286
Auto (personal share) 1,386	2,943	2,892	3,659	3,040 3,577	3.456
Stocks & bonds 2,509 Household furnishings 7,095	3,068	1,618	3,659 2,885	3,5//	
			9,336	7,775	7,790
All other $4.939$					2,462
Tot. Nonfarm Assets**\$ 36,389	\$ 42,162	\$ 50,657	\$ 59,608	\$ 62,394	\$ 67,694
Total Farm & Nonfarm	<b>6000 070</b>	6257 240	A20A 150	6470 053	AEOE 044
Assets \$279,226	\$298,272	\$356,349	\$380,138	\$479,053	\$505,044
<u>LIABILITIES</u>					
Accounts payable \$ 1,502	\$ 1,478			\$ 3,275	\$ 3,769
Operating debt 388	451		1,912	851	1,026
Short term 933	1,648	1,216	1,265	1,481	1,291
Advanced gov't. rec. 0	0	0	_	0	0
Intermediate*** 23,857		38,415			
Long term* <u>54.881</u>			<u>74,337</u>		<u>79,627</u>
Total Farm Liab. \$81,562	\$ 80,602	\$123,480	\$121,099	\$132,859	\$133,556
Tot. Nonfarm Liab.** 805	1,247	2,009	2,308	<u>2,738</u>	<u>6,958</u>
Total Farm & Nonfarm					
Liabilities \$ 82,367	\$ 81,849	\$125,489	\$123,407	\$135,597	\$140,514
Farm Net Worth					
	\$175,508	\$182,212	\$199,451	\$283,801	\$303,794
Farm & Nonfarm	A017 / 00	****	A057 751	4040 456	4077 500
Net Worth \$196,859	\$216,423	\$230,860	\$256,751	\$343,456	\$364,530
	<u>Less than</u>		+0 to 54 Co	<u>ws</u> 55 to	69 Cows
Percent equity		69%	62%		69%
Debt/asset ratio-long term		).38	0.44		0.36
Debt/asset ratio-inter. & curr		0.23	0.31		0.25
Change in net worth with appre			\$17,238	\$19	9,993
Total farm debt per cow		303	\$2,577	\$2	2,154
Debt payments made per cow	•	3430	\$445		\$432
Debt payments as % of milk sal		21%	21%		21%
Amount avail. for debt service			\$23,140	\$28	3,374
Cash flow coverage ratio for 1	988 1	08	1.15		1.20

<sup>\*</sup>Includes discounted lease payments.

<sup>\*\*</sup>Average of farms reporting nonfarm assets and liabilities for 1988.

<sup>\*\*\*</sup>Includes FLB/PCA stock and discounted lease payments for cattle and machinery.

### FARM FAMILY FINANCIAL SITUATION BY HERD SIZE 406 New York Dairy Farms, 1988

Farms with:	70 to	84 Cows	85 to	99 Cows
Item	Jan. 1	Dec. 31	Jan. 1	Dec. 31
ASSETS				
Farm cash/chkg./savings	\$ 4,510	\$ 5,046	\$ 3,641	\$ 6,787
Accounts receivable	14,084	15,293	16,866	19,378
Prepaid expenses	0	4	0	0
Feed & supplies	34,010	37,259	41,775	46,435
Livestock*	97,948	104,483	115,682	124,050
Machinery & equipment*	92,466	95,936	108,882	112,275
FLB & PCA stock	3,019	3,159	3,693	3,717
Other stock & cert.	4,751	5,093	2,489	3,235
Land & buildings*	232,751	239,667	240,295	255,043
Total Farm Assets	\$483,539	\$505,940	\$533,323	\$570,919
	•			•
Pers. cash/chkg./savings	\$ 7,611	\$ 7,892	\$ 12,975	\$ 11,777
Cash value of life ins.	4,076	6,006	3,144	3,960
Nonfarm real estate	6,368	6,368	30,100	48,300
Auto (personal share)	3,311	4,115	2,716	2,404
Stocks & bonds	2,287	3,771	6,916	7,214
Household furnishings	8,600	8,776	6,280	6,400
All other	2,392	$\frac{2.370}{1.000}$	4,590	7,585
Total Nonfarm Assets**	\$ 34,644	\$ 39,297	\$ 66,722	\$ 87,641
Total Farm & Nonfarm	A-10 100	A=1= 00=	0.000 0.5	0650 560
Assets	\$518,183	\$545,237	\$600,045	\$658,560
<u>LIABILITIES</u>				
Accounts payable	\$ 5,742	\$ 4,956	\$ 5,422	\$ 5,940
Operating debt	1,422	2,410	2,663	4,065
Short term	1,712	2,109	3,093	981
Advanced gov't. rec.	176	0	0	0
Intermediate***	54,621	56,760	75,449	75,857
Long term*	<u>92,638</u>	<u>89,206</u>	<u>101,029</u>	<u>98,083</u>
Total Farm Liab.	\$156,310	\$155,441	\$187,656	\$184,926
Total Nonfarm Liab.**	<u> </u>	<u>1,058</u>	$_{-1,128}$	<u>3,084</u>
Total Farm & Nonfarm				
Liabilities	\$157,390	\$156,499	\$188,784	\$188,010
Farm Net Worth				
(Equity Capital)	\$327,229	\$350,500	\$345,667	\$385,993
Farm & Nonfarm Net Worth	\$360,793	\$388,738	\$411,261	\$470,550
FINANCIAL MEASURES	<u>70</u>	to 84 Cows	85 to	99 Cows
Percent equity		69%		68%
Debt/asset ratio-long term		0.37		0.38
Debt/asset ratio-inter. & co	urrent	0.25		0.27
Change in net worth with ap		\$23,271	\$4	40,327
Total farm debt per cow		\$1,968		\$1,926
Debt payments made per cow		\$470		\$579
Debt payments as % of milk	sales	22%		27%
Amount avail. for debt serv	ice	\$32,687	\$4	43,561
Cash flow coverage ratio for	r 1988	1.15		1.05
Amount avail. for debt serv	ice	\$32,687	Ş	43,561

<sup>\*</sup>Includes discounted lease payments.

<sup>\*\*</sup>Average of farms reporting nonfarm assets and liabilities for 1988.

<sup>\*\*\*</sup>Includes FLB/PCA stock and discounted lease payments for cattle and machinery.

### FARM FAMILY FINANCIAL SITUATION BY HERD SIZE 406 New York Dairy Farms, 1988

Farms with:	100 to	149 Cows	150 to 199 Cows	
<u>Item</u>	Jan, 1	Dec. 31	Jan. 1	Dec. 31
ASSETS				
Farm cash/chkg./savings	\$ 10,907	\$ 15,024	\$ 9,184 \$	15,950
Accounts receivable	22,149	25,052	34,103	37,876
Prepaid expenses	0	62	57	. 0
Feed & supplies	55,111	60,700	79,415	86,404
Livestock*	149,876	159,687	223,016	233,323
Machinery & equipment*	136,228	141,737	179,605	182,784
FLB & PCA stock	6,146	5,896	13,047	12,959
Other stock & cert.	5,952	6,261	16,900	16,437
Land & buildings*	327,973	335,407	<u>468,814</u>	493,711
Total Farm Assets	\$714,342	\$749,826		1,079,444
		•		
Pers. cash/chkg./savings	\$ 5,805	\$ 5,810	\$ 2,693 \$	2,738
Cash value of life ins.	5,260	5,825	10,159	12,195
Nonfarm real estate	91,000	110,969	42,571	51,143
Auto (personal share)	2,101	2,189	1,971	4,979
Stocks & bonds	2,549	3,483	836	945
Household furnishings	6,500	7,138	9,750	9,964
All other	2,871	2.711	1,854	14,863
Total Nonfarm Assets**	\$116,086	\$138,124	\$ 69,834 \$	96,827
Total Farm & Nonfarm				
Assets	\$830,428	\$887,950	\$1,093,975 \$3	1,176,271
<u>LIABILITIES</u>				
Accounts payable	\$ 4,179	\$ 4,376	\$ 9,549 \$	•
Operating debt	2,860	2,775	5,399	9,025
Short term	3,442	2,818	3,088	7,270
Advanced gov't. rec.	69	0	0	0
Intermediate***	99,192	99,795	137,202	129,905
Long term*	<u>135,158</u>	<u>131,475</u>	<u> 197,395</u>	<u>196,886</u>
Total Farm Liab.	\$244,900	\$241,239	\$ 352,633 \$	•
Total Nonfarm Liab.**	1.147	<u>945</u>	<u> </u>	<u>575</u>
Total Farm & Nonfarm				
Liabilities	\$246,047	\$242,184	\$ 353,810 \$	354,251
Farm Net Worth				
(Equity Capital)	\$469,442	\$508,587	\$ 671,508 \$	
Farm & Nonfarm Net Worth	\$584,381	\$645,766	\$ 740,165 \$	822,020
FINANCIAL MEASURES	100	) to 149 Cows	150 to	199 Cows
Percent equity		68%		67%
Debt/asset ratio-long term		0.39	0	. 40
Debt/asset ratio-inter. & c	urrent	0.26	0	. 27
Change in net worth with ap	prec.	\$39,145	\$54,	260
Total farm debt per cow		\$2,010	\$2,	
Debt payments made per cow		\$471	\$.	501
Debt payments as % of milk	sales	22%		24%
Amount avail. for debt serv	rice	\$55,340	\$70,	113
Cash flow coverage ratio fo	r 1988	1.09	1	.06
-				

<sup>\*</sup>Includes discounted lease payments.

<sup>\*\*</sup>Average of farms reporting nonfarm assets and liabilities for 1988.

<sup>\*\*\*</sup>Includes FLB/PCA stock and discounted lease payments for cattle and machinery.

#### FARM FAMILY FINANCIAL SITUATION BY HERD SIZE 406 New York Dairy Farms, 1988

Farms with:		200 to	299	Cows		More than	300 Cows
<u>Item</u>		Jan, 1		Dec. 31		Jan. 1	Dec. 31
<u>ASSETS</u>							
Farm cash/chkg./savings	\$	6,852	\$	6,047	\$	11,551	\$ 17,077
Accounts receivable	Ÿ	42,654	Y	46,641	٧	80,033	102,600
Prepaid expenses		0		381		3,601	5,032
Feed & supplies		110,563		120,265		261,579	288,123
Livestock*		294,678		310,431		496,895	564,900
Machinery & equipment*		196,810		218,866		314,866	338,523
FLB & PCA stock		13,911		15,602		15,888	21,595
Other stock & cert.		22,919		22,927		66,023	68,053
Land & buildings*		606,656		616,437	1	,032,410	1,132,831
Total Farm Assets	\$1	,295,043	\$1	,357,597		,282,846	\$2,538,735
					•		
Pers. cash/chkg./savings	\$	10,227	\$	11,091	\$	1,616	\$ 8,145
Cash value of life ins.		7,164		7,318		1,451	1,505
Nonfarm real estate		25,273		24,818		25,600	34,000
Auto (personal share)		3,773		4,159		2,935	3,900
Stocks & bonds		25,527		28,617		16,473	17,730
Household furnishings		10,000		10,455		8,600	9,200
All other		16,588		<u>18,481</u>		<u> 13,919</u>	<u>5,930</u>
Total Nonfarm Assets**	\$	98,552	\$	104,939	\$	70,595	\$ 80,411
Total Farm & Nonfarm							
Assets	\$1	,393,595	\$1	,462,536	\$2	,353,441	\$2,619,146
<u>LIABILITIES</u>							
Accounts payable	\$	9,504	\$	13,705	\$	9,653	\$ 11,539
Operating debt		10,964		10,809		57,635	89,818
Short term		12,095		19,329		15,232	24,590
Advanced gov't, rec.		0		0		0	0
Intermediate***		210,412		211,558		392,319	463,532
Long term*		209,592		207,354		469,520	461,387
Total Farm Liab.	\$	452,568	\$	462,755	\$	944,359	\$1,050,866
Total Nonfarm Liab.**		12,723		10,245		0	0
Total Farm & Nonfarm							
Liabilities	\$	465,291	\$	473,000	\$	944,359	\$1,050,866
Farm Net Worth							
(Equity Capital)	\$	842,475	\$	894,843	\$1	,338,487	\$1,487,869
Farm & Nonfarm Net Worth	\$	928,304	\$	989,536	\$1	,409,082	\$1,568,280
FINANCIAL MEASURES		<u>20</u>	0 to	299 Cows		More tha	an 300 Cows
Percent equity				66%			59%
Debt/asset ratio-long term	n			0.34			0.41
Debt/asset ratio-inter. &	cur	rent		0.34			0.42
Change in net worth with a	appr	ec.	\$5	2,367		\$1	L49,382
Total farm debt per cow				1,851		·	\$2,198
Debt payments made per cov	J		,	\$537	\$496		
Debt payments as % of mill		les		23%			20%
Amount avail. for debt ser			\$12	20,532		\$3	303,053
Cash flow coverage ratio			•	1.22		·	1.56

<sup>\*</sup>Includes discounted lease payments.

\*\*Average of farms reporting nonfarm assets and liabilities for 1988. \*\*\*Includes FLB/PCA stock and discounted lease payments for cattle and machinery.

### SELECTED BUSINESS FACTORS BY HERD SIZE 406 New York Dairy Farms, 1988

Farms with:	Less than	40 to	55 to	70 to	85 to
Item	40 Cows	54 Cows	69 Cows	84 Cows	99 Cows
Number of farms	29	67	81	53	36
Cropping Program Analysis					
Total Tillable acres	107	156	219	252	296
Tillable acres rented*	31	49	67	76	108
Hay crop acres*	78	98	131	139	168
Corn silage acres*	15	28	37	48	63
Hay crop, tons DM/acre	2.0	2.2	2.4	2.5	2.6
Corn silage, tons/acre	12.6	13.4	12.7	13.9	13.8
Oats, bushels/acre	3.0	33.4	58.1	42.8	41.5
Forage DM per cow, tons	6.7	7.4	7.7	7.5	7.9
Tillable acres/cow	3.2	3.3	3.6	3,3	3.2
Fert. & lime exp./til. acre	\$15.84	\$22.18	\$23.56	\$27.58	\$27.97
Total machinery costs	\$13,368	\$18,263	\$26,363	\$31,093	\$41,459
Machinery cost/tillable acre	\$125	\$117	\$120	\$123	\$140
Dairy Analysis					
Number of cows	33	47	61	77	93
Number of heifers	22	36	51	66	77
Milk sold, lbs.	544,550	742,474		1,252,616	
Milk sold/cow, 1bs.	16,264	15,833	16,006	16,165	17,356
Operating cost of prod. milk/cw		\$9.60	\$9.36	\$9.13	\$9.08
Total cost of prod. milk/cwt.	\$15.57	\$15.30	\$15.16	•	
Price/cwt. milk sold	\$12.68	\$12.98	\$12.87	•	
Purchased dairy feed/cow	\$626	\$613	\$575	\$584	•
Purchased dairy feed/cwt. milk	\$3.85	\$3.87	\$3.59		\$3.57
Purchased grain & conc. as %	70,00	Ψ3.07	40.52	43.01	ψ3.37
of milk receipts	27%	28%	279	s 279	s 289
Purchased feed & crop	_, 0	200	-,,		20.
expense/cwt. milk	\$4.43	\$4.66	\$4.50	\$4.57	\$4.51
Capital Efficiency					
Farm capital/worker	\$150,202	\$167,498	\$176,466	\$181,148	\$189,902
Farm capital/cow	7,451	6,677	6,975	6,385	5,958
Farm capital/til. acre owned	3,240	2,926	2,809	2,811	•
			2.009	7.011	2,937
	•				2 (72
Real estate/cow	4,082	3,546	3,567	3,048	
Machinery investment/cow	4,082 1,340	3,546 1,195	3,567 1,281	3,048 1,216	1,193
	4,082	3,546	3,567	3,048	
Machinery investment/cow Capital turnover, years  Labor Efficiency	4,082 1,340 2.83	3,546 1,195 2.53	3,567 1,281 2.66	3,048 1,216 2.39	1,193 2.11
Machinery investment/cow Capital turnover, years  Labor Efficiency Worker equivalent	4,082 1,340 2.83	3,546 1,195 2.53	3,567 1,281 2.66	3,048 1,216 2.39	1,193 2.11 2.91
Machinery investment/cow Capital turnover, years  Labor Efficiency Worker equivalent Operator/manager equivalent	4,082 1,340 2.83 1.66 1.10	3,546 1,195 2.53 1.87 1.16	3,567 1,281 2.66 2.42 1.36	3,048 1,216 2.39 2.73 1.41	1,193 2.11 2.91 1.31
Machinery investment/cow Capital turnover, years  Labor Efficiency Worker equivalent Operator/manager equivalent Milk sold/worker, lbs.	4,082 1,340 2.83 1.66 1.10 327,861	3,546 1,195 2.53 1.87 1.16 397,172	3,567 1,281 2.66 2.42 1.36 404,979	3,048 1,216 2.39 2.73 1.41 458,644	1,193 2.11 2.91 1.31 553,188
Machinery investment/cow Capital turnover, years  Labor Efficiency Worker equivalent Operator/manager equivalent Milk sold/worker, lbs. Cows/worker	4,082 1,340 2.83 1.66 1.10 327,861 20	3,546 1,195 2.53 1.87 1.16 397,172 25	3,567 1,281 2.66 2.42 1.36 404,979 25	3,048 1,216 2.39 2.73 1.41 458,644 28	1,193 2.11 2.91 1.31 553,188 32
Machinery investment/cow Capital turnover, years  Labor Efficiency Worker equivalent Operator/manager equivalent Milk sold/worker, lbs. Cows/worker Work units/worker	4,082 1,340 2.83 1.66 1.10 327,861 20 205	3,546 1,195 2.53 1.87 1.16 397,172 25 263	3,567 1,281 2.66 2.42 1.36 404,979 25 285	3,048 1,216 2.39 2.73 1.41 458,644 28 303	1,193 2.11 2.91 1.31 553,188
Machinery investment/cow Capital turnover, years  Labor Efficiency Worker equivalent Operator/manager equivalent Milk sold/worker, lbs. Cows/worker	4,082 1,340 2.83 1.66 1.10 327,861 20	3,546 1,195 2.53 1.87 1.16 397,172 25	3,567 1,281 2.66 2.42 1.36 404,979 25	3,048 1,216 2.39 2.73 1.41 458,644 28	1,193 2.11 2.91 1.31 553,188 32

<sup>\*</sup>Average of all farms, not only those reporting data.

### SELECTED BUSINESS FACTORS BY HERD SIZE 406 New York Dairy Farms, 1988

Farms with:	100 to	150 to	200 to	300 or
Item	149 Cows	199 Cows	299 Cows	More Cows
Number of farms	81	25	21	13
Cropping Program Analysis				
Total tillable acres	367	500	618	919
Tillable acres rented*	134	216	214	295
Hay crop acres*	190	241	243	309
Corn silage acres*	84	140	226	382
Hay crop, tons DM/acre	2.6	2.8	2.8	3.4
Corn silage, tons/acre	14.7	13.6	14.2	15.1
Oats, bushels/acre	44.7	58.3	35.3	54.6
Forage DM per cow, tons	7.7	7.6	7.2	6.5
Tillable acres/cow	3.1	2.9	2.6	2.0
Fert. & lime exp./til. acre	\$29.56	\$30.94	\$38.94	\$33.63
Total machinery costs	\$49,168	\$70,776	\$95,583	\$141,975
Machinery cost/tillable acre	\$134	\$142	\$155	\$155
Dairy Analysis				
Number of cows	119	172	241	453
Number of heifers	96	148	179	343
Milk sold, lbs.	1,959,901	2,864,891	4,099,894	8,665,733
Milk sold/cow, lbs.	16,531	16,656	17,036	19,113
Operating cost of prod. milk/cwt.	\$9.37	\$10.02	\$9.93	\$9.41
Total cost of prod. milk/cwt.	\$13.65	\$13.73	\$13.17	\$11.87
Price/cwt. milk sold	\$13.09	\$13.13	\$12.94	\$13.25
Purchased dairy feed/cow	\$593	\$635	\$652	\$737
Purchased dairy feed/cwt. milk	\$3.59	\$3.81	\$3.83	\$3.86
Purchased grain & conc. as %	•	•	•	•
of milk receipts	27%	29%	29%	289
Purchased feed & crop				
expense/cwt. milk	\$4.58	\$4.77	\$4.88	\$4.55
Capital Efficiency				
Farm capital/worker	\$206,856	\$214,798	\$220,180	\$236,828
Farm capital/cow	6,175	6,115	5,511	5,317
Farm capital/til. acre owned	3,142	3,703	3,283	3,870
Real estate/cow	2,798	2,798	2,541	2,388
Machinery investment/cow	1,172	1,053	864	721
Capital turnover, years	2.27	2.14	2.01	1.72
Labor Efficiency				
Labor Efficiency	3 67	<i>/</i> . 00	6 00	10 10
Worker equivalent	3.54	4.90	6.02	10.18
Operator/manager equivalent	1.48	1.56	1.42	1.47
Milk sold/worker, lbs.	553,786	585,070	680,615	851,294
Cows/worker	33	35	40	45
Work units/worker	351	371	405	438
Tabase and to an				
Labor cost/cow Labor cost/tillable acre	\$383 \$124	\$425 \$146	\$405 \$158	\$482 \$238

<sup>\*</sup>Average of all farms, not only those reporting data.

#### IDENTIFY AND SET GOALS

If businesses are to be successful, they must have direction. Written goals help provide businesses with an identifiable direction over both the long and the short term. Goal setting is as important on a dairy farm as it is in other businesses. Written goals are a tool which farm operators can use to ensure that the business continues to move in the proper direction.

- 1. Goals should be specific.
- 2. Goals should be realistic and achievable.
- 3. The achievement of the goal should be verifiable.
- 4. You should designate a time when each goal will be achieved.

Goal setting on a dairy farm does not have to be a complex process. In many cases it provides a process for writing down and agreeing on goals that you have already given some thought to. It is also important to remember that once you write out your goals they are not cast in concrete. If a change takes place which has a major impact on the farm business, the goals should be reworked to accommodate that change. Refer to your goals as often as necessary to keep the farm business progressing.

It is important to identify both long and short range goals when looking at the future of your farm business.

A suggested format for writing out your goals is as follows:

- a. Begin with a general philosophy statement which incorporates both business and family goals.
- b. Identify 4-6 long range goals.
- c. Identify specific short range goals for a given time period (i.e., one year).

#### Worksheet for Setting Goals

1. General Philosophy and Objectives									
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Worksheet for Setting Goals (continued)								
II. Long Range Goals (req	uire two or more y	ears to achieve	<b>e</b> )					
		***************************************						
III. Short Range Goals (	possible to achiev	ve in one or two	o years).					
What	How		When					

NOTE: Once long and short range goals have been identified, it is helpful to rank them in order of priority.

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### Other Agricultural Economics Extension Publications

No. 89-34	Farm Income Tax Management and Reporting Reference Manual	G. Casler S. Smith
No. 89-35	FORAGE PRODUCTION: A Pro-Dairy Management Focus Workshop for Farm Managers, Facilitator's and Participants Manual	N. R. Leonard R. A. Milligan W. D. Pardee
No. 89-36	Fruit Farm Business Summary, Lake Ontario Region, 1988	D. P. Snyder A. M. DeMarree
No. 89-37	New York Economic Handbook 1990, Agriculture Situation and Outlook	Extension Staff
No. 89-38	Census of Agricultural Highlights, New York State, 1987	B. Stanton W. Knoblauch L. Putnam
No. 90-1	Micro DFBS, A Guide to Processing Dairy Farm Business Summaries in County and Regional Extension Offices for Micro DFBS V 2.4	L. D. Putnam W. A. Knoblauch S. F. Smith
No. 90-2	Poultry Farm Business Summary, New York, 1988	D. P. Snyder S. Ackerman K. Park
No. 90-3	The Economics of Concord and Niagara Grape Production in the Great Lakes Region of New York, 1989	G. B. White J. S. Kamas
No. 90-4	Agricultural District Legislation in New York as Amended Through 1989	K. V. Gardner
No. 90-5	Agricultural Lending Policy of New York Commercial Banks	J. M. Thurgood E. L. LaDue
No. 90-6	Proceedings of Managing Farm Personnel in the 90's	Bernie Erven Guy Hutt Tom Maloney
No. 90-7	The U.S. Dairy Situation and Outlook for 1990	Andrew M. Novakovic